Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An assay method, comprising:

(a) providing a plurality of discrete solid support surface areas,

(b) providing a plurality of different ligands,

(c) defining a first set of different groups of the plurality of ligands,

(d) immobilizing each group of ligands on a different solid support surface area,

(e) providing a plurality of different analytes, each of which is capable of binding to a respective one of the plurality of ligands, at least about 75% ~~a major part~~ of the analytes having substantially no cross-reactivity to other ligands,

(f) defining a first set of different groups of the plurality of analytes, each analyte being present in at least one group,

(g) sequentially contacting each group of analytes with the surface areas to bind the analytes in each group to immobilized ligands, and

(h) detecting an ~~the~~ interaction of each group of analytes with each group of ligands to determine therefrom an ~~the~~ amount of binding of each analyte.

2. (Currently Amended) The method according to claim 1, wherein ~~at least about 75%, preferably~~ at least about 87.5% ~~90%~~ of the analytes have substantially no cross-reactivity to other ligands~~, bind specifically to a respective one of the plurality of ligands~~.

3. (Currently Amended) The method according to claim 1, wherein at least about 90% of the analytes have substantially no cross-reactivity to other ligands~~each analyte binds specifically to a respective one of the plurality of ligands~~.

4. (Original) The method according to claim 1, wherein none of the different groups of ligands includes all the different ligands.

5. (Original) The method according to claim 1, wherein none of the different groups of analytes includes all the different analytes.

6 (Original) The method according to claim 1, wherein each ligand is present in at least two different groups of ligands.

7. (Original) The method according to claim 1, wherein the groups of ligands and the groups of analytes are defined such that in each group of analytes, each analyte binds specifically to a different one of the different groups of ligands.

8. (Currently Amended) The method according to claim 1, wherein steps e) to h) in claim 1 are repeated with a second set of different groups of analytes, differently defined than the first set, to determine ~~the~~ possible influence of other analytes on the binding of a specific analyte to a specific ligand.

9. (Currently Amended) The method according to claim 1, wherein steps b) to h) in claim 1 are repeated with a second set of different groups of ligands, differently defined than the first set, to determine ~~the~~ possible influence of other ligands on the binding of a specific analyte to a specific ligand.

10. (Original) The method according to claim 1, wherein each group of analytes contains at least three different analytes.

11. (Original) The method according to claim 1, wherein each group of ligands contains at least three different ligands.

12. (Original) The method according to claim 7, which comprises providing a plurality of soluble ligands or ligand analogues which bind specifically to respective ones of the analytes, defining different groups of the soluble ligands or ligand analogues such that one ligand or ligand analogue in each group thereof binds specifically to one analyte in each group of analytes, and prior to step g) in claim 1 mixing each group of ligands or ligand analogues with its respective group of analytes.

13. (Original) The method according to claim 7, wherein prior to step g) in claim 1, each group of analytes is mixed with binding agents that compete with the analytes for the binding to their respective immobilized ligands.

14. (Original) The method according to claim 7, wherein prior to step g) in claim 1, respective specific binding partners to the immobilized ligands are contacted with the different solid support surface areas.

15. (Currently Amended) The method according to claim 1, wherein after determining the binding of the analytes in a group in step h) in claim 1, the surface areas are contacted with a regeneration solution, and ~~the~~ capability of the regeneration solution to remove each analyte from its ligand is determined.

16. (Original) The method according to claim 15, wherein the surface areas subjected to regeneration solution are sequentially contacted with the different groups of analytes to determine any change in binding in relation to that determined in step h) in claim 1.

17. (Original) The method according to claim 15, which is repeated with at least one different regeneration solution.

18. (Original) The method according to claim 1, wherein the solid support areas are sensing surface areas.

19. (Original) The method according to claim 1, wherein the interactions at the surface are monitored in real time.

20. (Original) The method according to claim 1, wherein mass changes at the surface areas are detected.

21. (Currently Amended) The method according to claim 1, wherein the detection is ~~based on~~ evanescent wave sensing.

22. (Currently Amended) The method according to claim 1, wherein the detection is ~~based on~~ surface plasmon resonance (SPR).

23. (Original) The method according to claim 18, wherein the sensing surface areas are provided in at least one flow cell.

24. (Original) The method according to claim 1, which comprises determining at least one of ligand immobilization efficiency, analyte concentration, interaction affinity and interaction kinetics.

25-32. (Canceled)

33. (Currently Amended) An assay method comprising:

(a) providing a plurality of discrete solid support surface areas,

(b) providing a plurality of n different ligands, wherein n is at least 2,

(c) defining different groups of the plurality of n ligands comprising single ligands and combinations of from two to n different ligands,

(d) immobilizing each group of ligands on a different surface area,

(e) sequentially contacting a plurality of n different analytes with each surface area, at least about 75% ~~a major part~~ of the analytes being capable of specifically binding to a respective one of the plurality of different ligands, and

(f) detecting an ~~the~~ interaction of each analyte with each group of ligands to determine therefrom an ~~the~~ amount of ligand-binding of each analyte, and ~~the~~ possible influence of ligand-ligand interaction on the binding of analyte to immobilized ligand.

34. (Currently Amended) The method according to claim 33, wherein ~~at least about 75%, preferably~~ at least about 87.5% ~~90%~~ of the analytes are capable of ~~, bind~~ specifically binding to a respective one of the plurality of ligands.

35. (Currently Amended) The method according to claim 33, wherein at least about 90% of the analytes are capable of ~~each analyte binds~~ specifically binding to a respective one of the plurality of ligands.

36. (Original) The method according to claim 33, wherein in step e) in claim 33, the surface areas are sequentially contacted with different groups of analytes, comprising single analytes and combinations of from two to n different analytes.

37. (Currently Amended) The method according to claim 33, wherein the solid support areas are sensing surface areas, and the detection is ~~based on~~ evanescent wave sensing.

38. (Original) The method according to claim 33, which comprises determining at least one of ligand immobilization efficiency, analyte concentration, interaction affinity and interaction kinetics.

39-47. (Canceled)

48. (Currently Amended) An assay method comprising:

(a) providing a plurality of discrete solid support surface areas,

(b) providing a plurality of different ligands,

(c) defining different groups of the plurality of ligands,

(d) immobilizing each group of ligands on a different solid support surface area,

(e) providing a plurality of different analytes, each of which is capable of binding to a respective one of the plurality of ligands, at least about 75% ~~a major part of~~ the analytes having substantially no cross-reactivity to other ligands,

(f) sequentially contacting each analyte with the surface areas to bind the analytes to the immobilized ligands, and

(g) detecting an ~~the~~ interaction of analyte with each group of immobilized ligands to determine therefrom an ~~the~~ amount of binding of each analyte.

49. (Currently Amended) The method according to claim 48, wherein ~~at least about 75%, preferably~~ at least about 87.5% ~~90%~~ of the analytes have substantially no cross-reactivity to other ligands~~, bind specifically to a respective one of the plurality of ligands~~.

50. (Currently Amended) The method according to claim 48, wherein at least about 90% of the analytes have substantially no cross-reactivity to other ligands~~each analyte binds specifically to a respective one of the plurality of ligands~~.

51. (Currently Amended) The method according to claim 48, wherein the solid support areas are sensing surface areas, and the detection is ~~based on~~ evanescent wave sensing.

52. (Original) The method according to claim 48, which comprises determining at least one of ligand immobilization efficiency, analyte concentration, interaction affinity and interaction kinetics.

53-64. (Canceled)